

GC M1 End of Assessment Study Guide

Solutions

①

Percent	Part	Whole
A) 25%	35	?

B) $\frac{25}{100} = \frac{35}{?}$ } need to scale down
 $\frac{25}{100} = \frac{1}{4}$

$\frac{1}{4} = \frac{35}{?}$ } original price
 $4 \cdot 35 = 140$

②

Club	Percent	Decimal	Fraction
Year	35%	.35	$\frac{35}{100}$
photo	25%	.25	$\frac{25}{100}$
French	40%	.40	$\frac{40}{100}$

$$\begin{array}{r} 35 \\ +25 \\ \hline 60 \end{array} \quad \begin{array}{r} 100 \\ -60 \\ \hline 40 \end{array}$$

③ 4 lb bag \$3.60

6 lb bag \$4.80

④ which is the better buy?

4 lb

$$\frac{3.60}{4} = 0.90 \text{ per pound}$$

$$\begin{array}{r} 4 \overline{) 3.60} \\ \underline{36} \\ 00 \\ \underline{00} \\ 0 \end{array}$$

6 lb

$$\frac{4.80}{6} = .80 \text{ per pound}$$

$$\begin{array}{r} 6 \overline{) 4.80} \\ \underline{48} \\ 00 \\ \underline{00} \\ 0 \end{array}$$

Solution

Since the 4 lb bag cost .90 per pound and the 6 lb bag cost .80 per pound, the 6 lb bag is the better buy because it's cheaper.

3B) $.90 - .80 = .10$ The 6 lb bag is 10¢ cheaper per pound.

$$\begin{array}{r} 4) \quad 1200 \\ \times 360 \\ \hline 432,000 \text{ items} \\ \text{in 20 minutes} \end{array}$$

$$5) \quad A. \quad \begin{array}{r} 30 \times 20 \\ 100 \times 20 \end{array} = \frac{600}{2,000}$$

B. 600 is the part

$$6) \quad \begin{array}{r} 250 \\ \times 40 \\ \hline 10,000 \text{ gals} \\ \text{in 40 min.} \end{array}$$

$$7) \quad \begin{array}{r} 22,500 \div 250 \\ \hline 90 \text{ minutes} \end{array}$$

$$8) \quad \begin{array}{r} 80 = \frac{24}{100} \\ \frac{8 \cdot 3 = 24}{10 \cdot 3 = 30} \end{array}$$

There were 30 questions on the quiz

8)

F	D	P
$\frac{4}{5}$.80	80%
$\frac{375}{1000}$	0.375	37.5%
$\frac{765}{1000}$.765	76.5%
$\frac{7}{10}$.7	70%

9) A) $16.50 \div 2 = 8.25$
 $99 \div 12 = 8.25$
 $198 - 24 = 8.25$
 $396 \div 48 = 8.25$

Larry earns \$8.25 for each hour.

9B) Jane = 8.75 per hour
 Larry = 8.25 per hour
 Jane earns more money per hour.

10)

$$\begin{array}{l} 112.5 \text{ miles} = d \\ 22.5 \text{ hours} = t \\ ? = r \end{array}$$

$$d = r \cdot t$$

$$112.5 = r \cdot 22.5$$

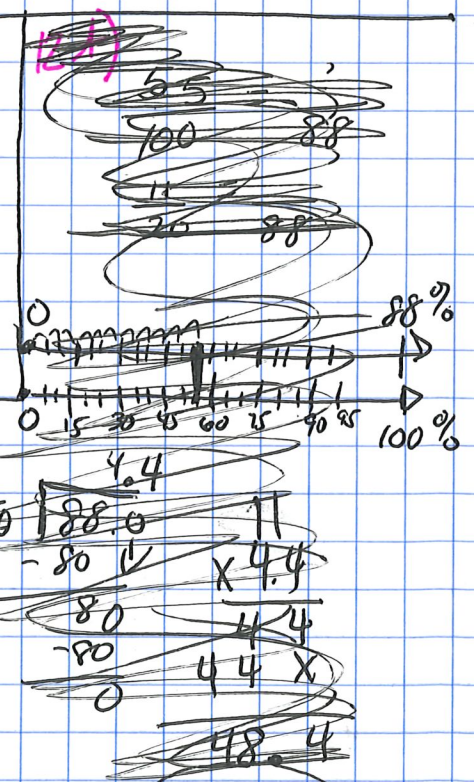
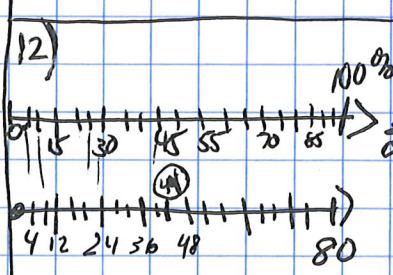
$$112.5 \div 22.5 = r$$

$$5 = r$$

Selena is traveling 5 miles per hour

11)

qt	gal
4	$1 \cdot 4 = 4$
80	$20 \cdot 4 = 80$



12A)

$$\frac{55}{100} = \frac{?}{80} = \frac{11}{20} = \frac{44}{80}$$

44 students are boys

12B)

$$\begin{array}{r} 80 \\ - 44 \\ \hline 36 \\ \hline \text{girls} \end{array}$$

13A) 10 ounces

$$7.11 \div 10 =$$

$$.71 \text{ per } \textcircled{10} \text{ oz}$$

(Round .711 to .71)

13B) 20 ounces

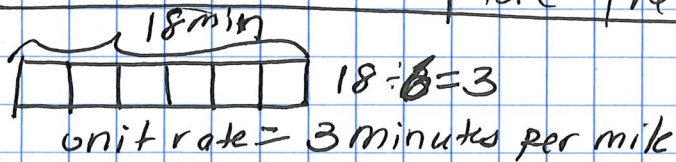
$$15 \div 20 =$$

$$.75 \text{ per } \textcircled{20} \text{ oz}$$

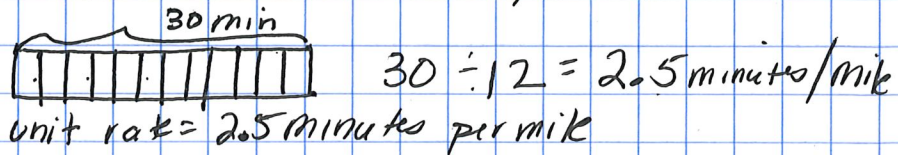
13C)

Since the 10oz cost .71 per oz and the 20 oz cost .75 per oz, the 10 oz is cheaper per oz therefore the better buy.

14) Dolphin: 6 miles
18 min



Sting Ray: 12 miles
30 min



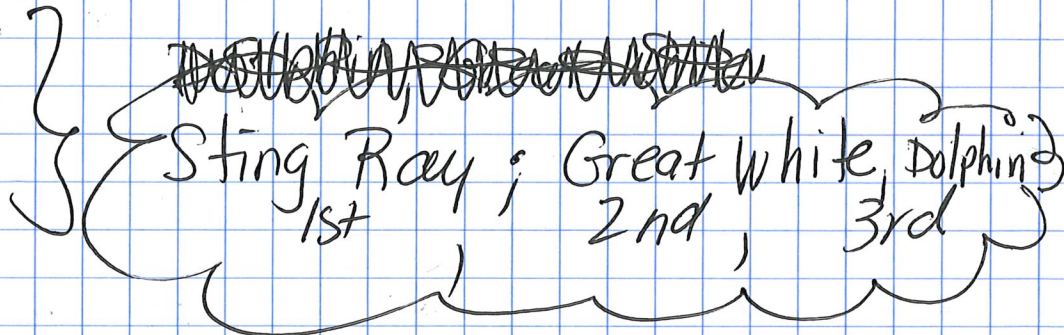
Great White: 94 miles
240 min

$$240 \div 94 = 2.55 \text{ minutes per mile}$$

unit rate = 2.55 minutes per mile

Order: Fastest to Slowest

Dolphin	3
Sting Ray	2.50
Great White	2.55



Tony
5) 55 mph = r
3 hours = t
165 miles = d

Alan
65 mph = r
2.5 hours = t
162.5 miles = d

A) who drove further?
Tony went further. He went 165 miles while Alan went 162.5 miles.

B)

$$\begin{array}{r} 165.0 \\ - 162.5 \\ \hline \end{array}$$

2.5 miles further

16) lb | oz
1 | 16 ÷ 16
5 lbs | 80 ÷ 16 = 5